COUNTY COUNCIL

OF

HARFORD COUNTY, MARYLAND

BILL NO. 10-35

Introduced by Council President Boniface at the request of the County Executive

Legislative Day No. 10-24 Date December 7, 2010

AN EMERGENCY ACT to repeal and reenact, with amendments, Chapter 82, Building Construction, of the Harford County Code, as amended; to provide that Harford County shall adopt as its standard for building regulations the 2009 International Building Code, the 2009 International Residential Code and the 2009 International Mechanical Code with certain amendments thereto; to further provide penalties for the violation of the building standards; and generally relating to buildings and construction in Harford County, Maryland.

By the Council, December 7, 2010

Introduced, read first time, ordered posted and public hearing scheduled

on: January 4, 2011

at: 6:30pm

By Order: Barbara J. O'Connor, Council Administrator

**PUBLIC HEARING**

Having been posted and notice of time and place of hearing and title of Bill having been published according to the Charter, a public hearing was held on January 4, 2011, and concluded on January 4, 2011.

Barbara J. O'Connor, Council Administrator

EXPLANATION: CAPITALS INDICATE MATTER ADDED TO EXISTING LAW. [Brackets] indicate matter deleted from existing law. Underlining indicates language added to Bill by amendment. Language lined through indicates matter stricken out of Bill by amendment.

Section 1. Be It Enacted By The County Council of Harford County, Maryland that Chapter 82, Building Construction, of the Harford County Code, as amended, be, and it is hereby, repealed and reenacted, with amendments, all to read as follows:

**Chapter 82. Building Construction**

**Article I. [2006]2009 International Building Code**

**§ 82-1. Adoption of [2006]2009 International Building Code by reference.**

A. The [2006]2009 International Building Code (hereinafter referred to as the Building Code, or code) published by the International Code Council, Inc., is hereby adopted and by reference thereto is made a part of this chapter with the same force and effect as though set out in full herein, save and except such changes, amendments, revisions, deletions, subsections and/or additions as are specified in this chapter. If conflicts with this code, or with changes, amendments, revisions, deletions, subsections, and/or additions to that code are found elsewhere in the County Code, the most restrictive provisions shall govern.

B. At least one copy of this code and supplements thereto shall be on file and open for public use, examination and inspection in the office of the Director of Administration and in the office of the Council Administrator.

**§ 82-2. Modifications.**

A. Definitions.

(1) As used in this code, the term "building official" means the Director of the Department of Inspections, Licenses and Permits.

(2) As used in this code, the term "Department of Building Safety" means the Department of Inspections, Licenses and Permits.

(3) As used in this code, the term "Harford County Hazardous Materials Team" means the Harford County Hazardous Materials Team as created by the Harford County Division of Emergency Operations.

(4) As used in this code, the term "ICC Electrical Code" means the Harford County

Electrical Code, Chapter 105 (Article I, Section 105-3, *et seq.*) of the Harford County Code.

(5) As used in this code, the term "International Fuel Gas Code" means the Harford County Plumbing Code, Chapter 202 (Section 202-1, *et seq.*) of the Harford County Code.

(6) As used in this code, the term "International Plumbing Code" means the Harford County Plumbing Code, Chapter 202 (Section 202-1, *et seq.*) of the Harford County Code.

(7) As used in this code, the term "ICC/ANSI 117.1" means the Maryland Accessibility Code set forth in Code of Maryland Regulations, Title 5, Subtitle 05.02.02.

B. The following sections are changes or additions to certain sections of the [2006]2009 International Building Code.

(1) Subsection 101.1 is hereby amended by substituting "Harford County, Maryland" for "name of jurisdiction" in the second line.

[(2) Subsection 101.2 is amended by adding the following exceptions:

"2. Existing buildings undergoing repair, alterations or additions and change of occupancy shall be permitted to comply with the 2006 International Existing Building Code.

3. Existing buildings as defined in COMAR 05.16.01.03B(22) undergoing repair, alterations or additions, and change of occupancy may comply with the Maryland Building Rehabilitation Code (MBRC) set forth in COMAR 05.16.01-.08."

(3)](2) Subsection 101.2.1 is deleted and the following is inserted in lieu thereof:

"**101.2.1 Appendices**. Provisions in Appendix B, Board of Appeals; Appendix C, Group U - Agricultural Buildings; Appendix F, Rodent Proofing; and Appendix I, Patio Covers, are adopted as part of the Harford County Building Code."

[(4) Subsection 101.4.1 is deleted.

(5) Subsection 101.4.2 is deleted.

(6)](3) Subsection 101.4.4 is deleted.

[(7) Subsection 101.4.5 is deleted.

(8)](4) Subsection 102.6 is amended by deleting "the International Property Maintenance Code" starting in the fourth line.

[(9)](5) Subsection 103.3 is amended by deleting the last sentence: "For the maintenance of existing properties, see the International Property Maintenance Code."

[(10)](6) Subsection 104.6 is amended by adding a new sentence at the end of the section: "Nothing in this section shall be deemed to restrict or otherwise limit the provisions of Section 1-18 of the Harford County Code."

[(11)](7) New Subsection 104.12 is added as follows:

"**104.12 Restriction of employees.** An official or employee connected with the Department of Building Safety, except one whose only connection is that of a member of the Board of Appeals established under the provisions of Appendix B, shall not be engaged in or directly or indirectly connected with the furnishing of labor, materials or appliances for the construction, alteration or maintenance of a building, or the preparation of construction documents thereof, unless that person is the owner of the building; nor shall such officer or employee engage in any work that conflicts with official duties or with the interests of the Department."

[(12)](8) Subsection 105.1.1 is deleted.

[(13)](9) Subsection 105.1.2 is deleted.

[(14)](10) Subsection 105.2 is amended by deleting subheadings "Electrical[," "Gas]" and "Plumbing" and by amending subheading "Building" by adding and modifying the following sub-items:

"1. The provisions of this code shall not apply to structures not more than one story in height and are 200 square feet or less in area and are not classified as use

Group H, High Hazard.

14. The provisions of this code shall not apply to the construction, alteration or modification of an agricultural building, as defined in Section 202 and as identified in Appendix C, Subsection C101.1. A legally existing agricultural building shall not be considered as a 'change of occupancy' that requires a building permit if the subordinate use is in accordance with the limitations set forth in Sections 302.2, [and] 302.2.1 AND ANY CODE SECTIONS REFERENCED THEREIN OF THE 2003 INTERNATIONAL BUILDING CODE. The provisions of this code shall also not apply to an agricultural use area located within an agricultural building on the level of exit discharge, not greater than 3,000 square feet in area, and the agricultural use area does not exceed the tabular values in Table 503 for the allowable height or area of such use.

15. One story detached accessory structures to use Group R-3, provided the floor area does not exceed 200 square feet.

16. The provisions of this code respecting agricultural building permit requirements shall be as set forth in the attached table entitled 'Agricultural BuildingS PermitTING Requirements [Table].'

17. CONSTRUCTION TRAILERS AS DEFINED IN CHAPTER 2 OF THE INTERNATIONAL BUILDING CODE AS ADOPTED."

[(15)](11) Subsection 105.5 is amended by deleting "180 days" in the third line and inserting "12 months" in lieu thereof.

[(16)](12) New Subsection 105.6.1 is added as follows:

"**105.6.1 Withholding permits.** The building official may withhold the issuance of any permit and/or place a hold on inspections if the applicant, the owner or any individual listed on the application as a responsible officer (if the applicant is a business

entity) has failed to remedy or correct any existing/alleged violation of the Harford County Code on any construction projects in Harford County for which the applicant has been cited by any County agency."

(13) SECTION 106 IS DELETED IN ITS ENTIRETY.

[(17)](14) Subsection [108.2]109.2 is deleted and the following is inserted in lieu thereof:

"**[108.2]109.2 Schedule of permit fees.** On buildings, structures, mechanical systems or alterations requiring a permit, a fee for each permit shall be paid as required, in accordance with Chapter 157 of the Harford County Code."

[(18)](15) New Subsection [109.1.1]110.1.1 is added as follows:

"**[109.1.1]110.1.1 Purpose of inspections.** All inspections conducted by the Department of Inspections, Licenses and Permits are performed for the protection and promotion of public safety, health and welfare. The inspections are made solely for the public benefit and are not to be construed as providing any warranty of construction to individual members of the public."

[(19)](16) New Subsection [109.3.8.1]110.3.8.1 is added as follows:

"**[109.3.8.1]110.3.8.1 Hazardous materials inspections.** As deemed necessary by the building official, approval from the Harford County Hazardous Materials Team may be required prior to a certificate of occupancy being issued."

[(20)](17) New Subsection [109.7]110.7 is added as follows:

"**[109.7]110.7 Standards.** All buildings, structures and appurtenances thereto shall be constructed strictly in compliance with accepted engineering practice. All members and components of the structure shall be installed, fitted or fastened, moved or stored in such a manner that the full structural capabilities of the members are obtained. Improper alignment (level and square), fitting, fastening or methods of construction shall be considered a violation of this code."

[(21)](18) Subsection [110.3]111.3 is amended by adding the following at the end of the

Subsection: "Any person, firm or corporation engaged in the process of selling property in which a temporary certificate of occupancy is issued shall at the time of settlement present to the buyer a copy of the temporary certificate of occupancy which must include a list of deficiencies that remain to be corrected."

[(22)](19) Subsection [113.4]114.4 is amended by deleting the phrase "shall be subject to penalties as prescribed by law" in the last line and inserting the following in lieu thereof: "shall be guilty of a misdemeanor, punishable by a fine of not more than $1,000 or by imprisonment not exceeding [ninety]90 days, or both such fine and imprisonment. Each day that a violation continues shall be deemed a separate offense."

[(23)](20) Subsection [115.3]116.3 is deleted and the following is inserted in lieu thereof:

"**[115.3]116.3 Notice.** If an unsafe condition is found, the building official shall serve on the owner, agent or person in control of the structure, a written notice of violation that describes the condition deemed unsafe and specifies the required repairs or improvements to be made to abate the unsafe condition or to demolish the unsafe structure within a (specified period of) stipulated time.

Unless the person served with an order makes a timely request for a hearing pursuant to Section [115.7]116.7, the order becomes a final order on the eleventh day after service.

If a person who has been issued an order under this section makes a timely request for a hearing, i.e., requests a hearing within [ten]10 days from service in accordance with Section [115.7]116.7, the order becomes a final corrective order if the Director of Administration affirms the order following the hearing."

[(24)](21) New Subsection [115.6]116.6 is added as follows:

"**[115.6]116.6 Abatement.** If a person who has been issued an order under this section fails, within the time limit specified in a notice of violation or order, to abate the unsafe condition as directed, the Department of Building Safety may take whatever abatement

action that may be necessary by use of County employees and equipment and/or by contract with private contractors. The cost and expense of abating the unsafe condition shall be certified by the Department of Building Safety to the County Treasurer together with the name of the owner of the property on which the violation occurred as determined from the property tax assessment records. These charges shall constitute a lien upon the real property and shall be collectible in the same manner as real property taxes with the same priority, interest and penalties. Initiation of abatement action shall not preclude the issuance of any other action or legal proceedings authorized or permitted under this code, the laws of the State of Maryland and the common law."

[(25)](22) New Subsection [115.6.1]116.6.1 is added as follows:

"**[115.6.1]116.6.1 Notice of abatement action.** The Department of Building Safety, before or within [ten]10 days after commencement of any abatement action, shall issue a notice of abatement action to the owner of the property on which the abatement action has been or will be commenced. The notice shall describe the abatement action to be undertaken and shall specify that the costs for the action shall constitute a lien on the real property of the owner.

Service of the notice of abatement action issued by the Department of Building Safety shall be served as provided for by Subsection [115.4]116.4 of this code."

[(26)](23) New Subsection [115.7]116.7 is added as follows:

"**[115.7]116.7 Hearing.** The property owner or agent receiving a notice of violation issued under Subsection [115.3]116.3, a notice of abatement issued under Section [115.6.1]116.6.1 or a lien upon the real property may request a hearing within [ten]10 days from the receipt or posting of such notice or lien issued by the Department of Building Safety. The request must be in writing and served personally on the Director of Administration or by certified mail, return receipt requested, bearing a postmark from the United States Postal Service.

The Director of Administration may subpoena anyone having any connection with a hearing under this section as a witness or to give evidence relating to a notice of violation. A subpoenaed witness who is not an employee of the Harford County Government shall receive the same fees and mileage reimbursement as if the hearing were a part of a civil action in the Circuit Court of Maryland."

[(27)](24) New Subsection [115.8]116.8 is added as follows:

"**[115.8]116.8 Finality of lien.** Unless a person served with a notice of abatement makes a timely request for a hearing pursuant to Subsection [115.7]116.7, the lien shall become final on the property upon completion of the work. If a person makes a timely request for a hearing, any lien on the property shall become final after completion of all the work the Director of Administration determines was properly conducted by way of abatement action."

[(28)](25) New Section [116]117 is added as follows:

**"SECTION [116]117.**

**EMERGENCY MEASURES**

**[116.1]117.1 Imminent danger.** When, in the opinion of the building official, there is imminent danger of failure or collapse of a building or structure or any part thereof which endangers life, or when any structure or part of a structure has fallen and life is endangered by the occupation of the building or structure, the building official is hereby authorized and empowered to order and require the occupants to vacate the same forthwith. The building official shall post at each entrance of such structure a notice reading as follows: 'This structure is unsafe and its occupancy has been prohibited by the building official. It shall be unlawful for any person to enter such structure except for the purpose of making the required repairs or of demolishing the same.'

**[116.2]117.2 Temporary safeguards.** When, in the opinion of the building official, there is imminent danger due to an unsafe condition, the building official [shall] MAY

cause the necessary work to be done to render such structure temporarily safe, whether or not the legal procedure herein described has been instituted.

**[116.3]117.3 Closing streets.** When necessary for public safety, the building official shall temporarily close structures and close, or order the authority having jurisdiction to close, sidewalks, streets, public ways and places adjacent to unsafe structures and prohibit the same from being used.

**[116.4]117.4 Emergency repairs.** For the purposes of this section, the building official shall employ the necessary labor and materials to perform the required work as expeditiously as possible.

**[116.5]117.5 Costs of emergency repairs.** Costs incurred in the performance of emergency work shall be paid from the treasury of the jurisdiction on approval of the building official. The legal counsel of the jurisdiction shall institute appropriate action against the owner of the premises where the unsafe structure is or was located to recover the costs incurred by the jurisdiction for the performance of the emergency work.

**[116.6]117.6 Unsafe equipment.** Equipment deemed unsafe by the building official shall not be operated after the date stated in the written notice unless the required repairs or changes have been made and the equipment has been approved, or unless an extension of time has been secured from the building official in writing.

**[116.6.1]117.6.1 Authority to seal equipment.** In the case of an emergency, the building official shall have the authority to immediately seal out of service any unsafe device or equipment regulated by this code.

**[116.6.2]117.6.2 Unlawful to remove seal.** Any device or equipment sealed out of service by the building official shall be plainly identified in an approved manner. The identification shall not be tampered with, defaced or removed except by the building official and shall indicate the reason for such sealing."

[(29)](26) Section 202 is amended by deleting the definition of "agricultural, building" and inserting the following in lieu thereof:

"**AGRICULTURAL, BUILDING.** A structure located on land zoned agricultural which is designed and constructed to house farm implements, hay, grain, poultry, livestock or other horticultural products. This structure shall not be a place of human residence."

(27) SECTION 202 IS AMENDED BY ADDING THE FOLLOWING DEFINITION BETWEEN THE TERMS "CONSTRUCTION DOCUMENTS" AND "CONSTRUCTION TYPES":

"**CONSTRUCTION TRAILER.** A SINGLE UNIT INDUSTRIALIZED BUILDING THAT MEETS ALL OF THE FOLLOWING CRITERIA:

1. HAS A BODY WIDTH OF NO MORE THAN 12 FEET AND HAS A BODY LENGTH NOT TO EXCEED 60 FEET;
2. THE UNIT MUST BE PLACED ON AN ACTIVE CONSTRUCTION SITE AND REMOVED WITHIN 30 DAYS OF THE COMPLETION OF THE CONSTRUCTION;
3. THE UNIT SHALL NOT BE OPEN TO THE PUBLIC AND SHALL BE FOR THE EXCLUSIVE USE OF THE ON-SITE CONTRACTORS TO CONDUCT NECESSARY BUSINESS OR TO STORE CONSTRUCTION MATERIALS RELATED TO THE CONSTRUCTION PROJECT; AND
4. ALL APPLICABLE ELECTRICAL AND PLUMBING INSTALLATIONS HAVE APPROVED TEMPORARY PERMITS AND HAVE RECEIVED APPROPRIATE INSPECTIONS AND OCCUPANCY APPROVALS."

[(30) Subsection 302.2 is amended by adding the following exception:

"**Exception.** An accessory agricultural use area located within an agricultural building shall be on the level of exit discharge, shall not be greater than 3,000 square feet in

area, and the accessory agricultural use area does not exceed the tabular values in Table 503 for the allowable height or area for such use."

(31)](28) Subsection 406.1.4 is amended by deleting in item 1 "1/2-inch (12.7 mm)" and inserting in lieu thereof "5/8-inch (15.9 mm)" in the third line.

[(32)](29) Subsection 501.2 is deleted and the following is inserted in lieu thereof:

"**501.2 Premises identification.** Address numbers shall be provided on new or renovated buildings as required by Chapter 84 of the Harford County Code."

(30) SUBSECTION 508.2 IS AMENDED BY ADDING THE FOLLOWING EXCEPTION:

"**EXCEPTION.** AN ACCESSORY AGRICULTURAL USE AREA LOCATED WITHIN AN AGRICULTURAL BUILDING SHALL BE ON THE LEVEL OF EXIT DISCHARGE, SHALL NOT BE GREATER THAN 3,000 SQUARE FEET IN AREA, AND THE ACCESSORY AGRICULTURAL USE AREA DOES NOT EXCEED THE TABULAR VALUES IN TABLE 503 FOR THE ALLOWABLE HEIGHT OR AREA FOR SUCH USE."

[(33) Subsection 705.6 is amended by adding Exception 6.

"6. In Groups R-2 and R-3 as applicable in Section 101.2, walls are permitted to terminate at the roof sheathing or deck in buildings of construction types III, IV and V if the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 for Group R-2, and 903.3.1.1, 903.3.1.2 or 903.3.1.3 for Group R-3."

(34)](31) New Section [913]916 is added as follows:

**["SECTION 913**

**CARBON MONOXIDE DETECTORS**

**913.1 Carbon monoxide detectors.** Carbon monoxide detectors shall be installed as required by the Public Safety Article, Title 12, Subtitle 11 of the Annotated Code of

Maryland."]

**"SECTION 916**

**CARBON MONOXIDE ALARMS**

**916.1 CARBON MONOXIDE ALARMS.** FOR NEW CONSTRUCTION, AN APPROVED CARBON MONOXIDE ALARM SHALL BE INSTALLED OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS IN DWELLING UNITS WITHIN WHICH FUEL-FIRED APPLIANCES ARE INSTALLED AND IN DWELLING UNITS THAT HAVE ATTACHED GARAGES.

**916.2 WHERE REQUIRED IN EXISTING DWELLINGS.** WHERE WORK REQUIRING A PERMIT OCCURS IN EXISTING DWELLINGS THAT HAVE ATTACHED GARAGES OR IN EXISTING DWELLINGS WITHIN WHICH FUEL-FIRED APPLIANCES EXIST, CARBON MONOXIDE ALARMS SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 916.1.

**916.3 ALARM REQUIREMENTS.** SINGLE STATION CARBON MONOXIDE ALARMS SHALL BE LISTED AS COMPLYING WITH UL 2034 AND SHALL BE INSTALLED IN ACCORDANCE WITH THIS CODE AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS."

[(35) Subsection 1009.3 is amended by deleting Exception 4 and inserting the following in lieu thereof:

"4. In occupancies in Group R-3, as applicable in Section 101.2, within dwelling units in occupancies in Group R-2, as applicable in Section 101.2, and in occupancies in Group U, which are accessory to an occupancy in Group R-3, as applicable in Section 101.2, the maximum riser height shall be 8 1/4 inches (209.5 mm) and the minimum tread depth shall be 9 inches (228.6 mm), the minimum winder tread depth at the walk line shall be 9 inches (229 mm) and

the minimum winder tread depth shall be 6 inches (152 mm). A nosing not less than 0.075 inches (19.1 mm) but not more than 1.25 inches (32 mm) shall be provided on stairways with solid risers where the tread depth is less than 11 inches (279 mm)."

(36)][(32) Subsection 1101.2 is deleted and the following is inserted in lieu thereof:

"**1101.2 Design.** Buildings and facilities shall be designed and constructed to be accessible in accordance with COMAR 05.02.02.

**Exception:** The design of covered multi-family dwellings as set forth in COMAR 05.02.02.05B(9) shall be in accordance with this chapter and ICC A117.1."

[(37)][(33) New Subsection 1106.8 is added as follows:

"**1106.8 Identification.** Each accessible parking space provided shall be identified as set forth in COMAR 05.02.02.07D."

[(38)][(34) Figure 1608.2 is amended by adding the following note:

"1. The ground snow load, $p_g$, for Harford County, Maryland shall be 30 psf."

[(39)][(35) Subsection 1612.3 is amended by deleting "insert name of jurisdiction" in the seventh line and inserting in lieu thereof "Harford County, Maryland" and by deleting "insert date of issuance" starting in the seventh line and inserting in lieu thereof "January 7, 2000".

[(40) New Subsection 1805.2.1.1 is added as follows:

"**1805.2.1.1 Establishment of frost line.** The frost line shall be established at 30" (762 mm) below the finished grade."]

(36) SUBSECTION 1809.5 IS AMENDED BY DELETING METHOD 1 AND INSERTING IN LIEU THEREOF "1. EXTENDING BELOW THE FROST LINE ESTABLISHED AS 30" BELOW FINAL GRADE."

[(41)][(37) Chapter 29 is deleted. Chapter 202 of the Harford County Code applies.

[(42)][(38) New Subsection [3001.2.1]3001.1.1 is added as follows:

"**[3001.2.1]3001.1.1 Maryland State Elevator Code.** The provisions of this code are in addition to the requirements in the Maryland State Elevator Code. If a conflict between this code and the state code exists, the requirements in the state code shall apply."

[(43)](39) Subsection 3103.1 is amended by adding "within any [three-hundred-sixty-five]365-consecutive-day period OR, WITH THE APPROVAL OF THE BUILDING OFFICIAL, MULTIPLE PERIODS EQUALING FEWER THAN 180 DAYS WITHIN ANY 365-CONSECUTIVE-DAY PERIOD" after the word "days" in the second [and fourth] line[s].

[(44)](40) Subsection 3103.1.1 is amended by deleting "120 square feet (11.16 mm)" in the second line and inserting in lieu thereof "350 square feet (32.55 mm)" and by deleting "10" in the fifth line and inserting in lieu thereof "50".

[(45)](41) New Subsection 3301.3 is added as follows:

"**3301.3 Housekeeping.** Rubbish and trash shall not be allowed to accumulate on construction sites and shall be removed as soon as conditions warrant. Combustible rubbish shall be removed promptly and shall not be disposed of by burning on the premises or in the immediate vicinity. The entire premises and area adjoining around the operation shall be kept in a safe and sanitary condition."

[(46)](42) Subsection 3401.3 is amended by deleting "International Property Maintenance Code, International Private Sewage Disposal Code" starting in the sixth line.

(43) SUBSECTION 3401.5 IS AMENDED BY ADDING "OR THE MARYLAND REHABILITATION CODE (MBRC) SET FORTH IN COMAR 05.16.01-.08." BETWEEN THE WORDS "CODE" AND "SHALL" IN THE SECOND LINE.

[(47)](44) Subsection [3410.2]3412.2 is amended by deleting "[date to be inserted by the jurisdiction. Note: It is recommended that this date coincide with the effective date of building codes within the jurisdiction]" and inserting in lieu thereof "March 1, 1968".

**Article II. [2006]2009 International Residential Code**

**§ 82-3. Adoption of [2006]2009 International Residential Code by reference.**

A. The [2006]2009 International Residential Code published by the International Code Council, Inc., is hereby adopted and by reference thereto is made a part of this chapter with the same force and effect as though set out in full herein, save and except such changes, amendments, revisions, deletions, subsections and/or additions as specified in this chapter. If conflicts with this code, or with changes, amendments, revisions, deletions, subsections and/or additions to that code are found elsewhere in the County Code, the most restrictive provisions shall govern.

B. At least one copy of this code and supplements thereto shall be on file and open for public use, examination and inspection in the office of the Director of Administration and in the office of the Council Administrator.

**§ 82-4. Modifications.**

[A.] The following sections are changes or additions to certain sections of the [2006]2009 International Residential Code:

(1) Subsection R101.1 is amended by deleting "name of jurisdiction" and inserting in lieu thereof "Harford County, Maryland".

(2) NEW SUBSECTION R101.4 IS ADDED AS FOLLOWS:

**"R101.4 SAFEGUARDS DURING CONSTRUCTION.** THE PROVISIONS OF CHAPTER 33 OF THE 2009 INTERNATIONAL BUILDING CODE AS ADOPTED BY ARTICLE I OF THIS CHAPTER SHALL BE APPLICABLE TO ALL CONSTRUCTION SITES POSSESSING A VALID BUILDING PERMIT."

[(2)](3) Subsection R102.5 is deleted and the following is inserted in lieu thereof:

**"R102.5 Appendices.** Provisions in Appendix A, Sizing and Capacities of Gas Piping; Appendix B, Sizing of Venting Systems Serving Appliances Equipped with Draft Hoods, Category I, Appliances, and Appliances listed for use and Type B vents; Appendix C, Exit Terminals of Mechanical Draft and Direct-vent Venting Systems;

Appendix D, Recommended Procedure for Safety Inspection of an Existing Appliance Installation; Appendix E, Manufactured Housing Used as Dwellings; Appendix G, Swimming Pools, Spas and Hot Tubs; Appendix H, Patio Covers; Appendix J, Existing Buildings and Structures; and Appendix K, Sound Transmission, shall be deemed as part of this code."

[(3) New Subsection R101.4 is added as follows:

"**R101.4 Safeguards during construction.** The provisions of Chapter 33 of the 2006 International Building Code as adopted by Article I of this chapter shall be applicable to all construction sites possessing a valid building permit."]

(4) Sections R103 through R114 of the [2006]2009 International Residential Code are deleted and Sections 102 through [116]117 of the [2006]2009 International Building Code, as amended, shall be applicable.

(5) Section R202 is amended by deleting the definition of "manufactured home" and inserting in lieu thereof:

"**MANUFACTURED HOME.** Manufactured home means a structure, transportable in one or more sections, which in the traveling mode is [eight]8 body feet or more in width or [forty]40 body feet or more in length or, when erected on site, is [three hundred twenty]320 or more square feet, and which is built on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities, and includes the plumbing, heating, air-conditioning and electrical systems contained therein. Calculations used to determine the number of square feet in a structure will be based on the structure's exterior dimensions measured at the largest horizontal projections when erected on site. These dimensions will include all expandable room, cabinets and other projections containing interior spaces, but do not include bay windows. This term includes all structures which meet the above requirements except the size requirements and with respect to which the

manufacturer voluntarily files a certification pursuant to § 3282.13 and complies with the standards set forth in Part 3280.

Note: for mobile homes built prior to June 15, 1976, a label certifying compliance to the standard for mobile home, NFPA 501, ANSI 119.1, in effect at the time of manufacture is required. For the purpose of these provisions, a mobile home shall be considered a manufactured home."

(6) Table R301.2(1) is amended by adding the following design values: "Ground snow load - 30 psf; Wind - 90 mph; TOPOGRAPHIC EFFECTS – NO; Seismic design category - b; Weathering - severe; Frost line depth - 30 inches (762 mm); Termite - moderate to heavy; Decay - slight to moderate; Winter design temp - 13° F.; Ice [shield] BARRIER underlayment required - no; Flood hazards - July 16, 1981 and January 7, 2000; Air freezing index - 554; Mean annual temp - 31°F.".

(7) New Subsection R302.1.1 is added as follows:

["**R302.1.1 Balconies, decks, porches or similar appendages.** Balconies, decks, porches or similar appendages attached to townhouses and constructed with combustible materials shall not be located closer than 24 inches (609.6 mm) to any property line."]

"**R302.1.1 BALCONIES AND DECKS ON TOWNHOMES.** ALL PORTIONS OF BALCONIES AND DECKS ON TOWNHOMES CONSTRUCTED OF COMBUSTIBLE MATERIALS SHALL NOT BE LOCATED CLOSER THAN 24 INCHES (609.6 MM) TO ANY PROPERTY LINE."

[(8) Subsection R309.1 is amended by adding "and shall be equipped with a self closing device" after the word "doors" in the last line.

(9) Subsection R309.2 is amended by deleting "1/2-inch (12.7 mm)" and inserting in lieu thereof "5/8-inch (15.9mm) fire code" in the second, eighth and tenth lines.]

[(10)](8) Subsection R311.2.2 is amended by adding the following exception:

"**Exception.** Enclosed accessible spaces under stairs when protected by an automatic sprinkler system installed in accordance with Section 903.3.1.3 of the [2006]2009 International Building Code."

[(11) Section R311.5.3.1 is amended by deleting "7 3/4 inches (196 mm)" in the second line and replacing with "8 1/4 inches (209.5 mm)".

(12) Section R311.5.3.2 is deleted and the following is inserted in lieu thereof:

"**R311.5.3.2 Tread depth.** The minimum tread depth shall be 9 inches (299 mm). The tread depth shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's leading edge. The greatest tread depth within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm). Winder treads shall have a minimum tread depth of 9 inches (299 mm) measured as above at a point 12 inches (305 mm) from the side where the treads are narrower. Winder treads shall have a minimum tread depth of 6 inches (152 mm) at any point. Within any flight of stairs, the greatest winder tread depth at the 12 inch (305 mm) walk line shall not exceed the smallest by more than 3/8 inch (9.5 mm)."

(13) Subsection R311.5.3.3 Exception 1 is amended by deleting "11 inches (279 mm)" in line two and inserting in lieu thereof "10 inches (254 mm)".]

[(14)](9) New Subsection R312.1.1 is added as follows:

"**R312.1.1 Areaway guards.** A guardrail or other approved barrier shall be installed on areaway walls with a grade level elevation difference of greater than 48 inches (1219.2 mm). Guards shall be constructed in accordance with Section R312."

(10) SUBSECTION R313.1.1 IS AMENDED BY ADDING "OR NFPA 13D" AT THE END OF THE SUBSECTION.

(11) SUBSECTION R313.2 IS AMENDED BY DELETING "2011" IN THE FIRST SENTENCE AND REPLACING WITH "2012".

(12) SUBSECTION R313.2 IS AMENDED BY DELETING THE EXCEPTION AND ADDING THE FOLLOWING:

1. AN AUTOMATIC RESIDENTIAL FIRE SPRINKLER SYSTEM SHALL NOT BE REQUIRED FOR ADDITIONS OR ALTERATIONS TO EXISTING BUILDINGS THAT ARE NOT ALREADY PROVIDED WITH AN AUTOMATIC RESIDENTIAL SPRINKLER SYSTEM.

2. AN AUTOMATIC RESIDENTIAL FIRE SPRINKLER SYSTEM SHALL NOT BE REQUIRED FOR A NEW ONE- OR TWO-FAMILY DWELLING CONSTRUCTED ON A LOT SERVED BY AN EXISTING SERVICE LINE FROM A WATER MAIN TO THE PROPERTY LINE THAT IS LESS THAN A NOMINAL 1 INCH SIZE OR A LOT SUBJECT TO A VALID UNEXPIRED PUBLIC WORKS UTILITY AGREEMENT THAT WAS EXECUTED PRIOR TO MARCH 1, 2011. FOR A PROPERTY TO QUALIFY FOR AN EXEMPTION DUE TO AN UNDERSIZED EXISTING WATER SERVICE LINE, THE WATER SERVICE LINE MUST BE (1) APPROVED AND OWNED BY THE PUBLIC OR PRIVATE WATER SYSTEM THAT OWNS THE MAINS, (2) INSTALLED PRIOR TO MARCH 1, 2011, AND (3) FULLY OPERATIONAL FROM THE PUBLIC OR PRIVATE MAIN TO A CURB STOP OR METER PIT LOCATED AT THE PROPERTY LINE.

[(15)](13) Subsection [R321.1]R319.1 is deleted and the following is inserted in lieu thereof:

"**[R321.1]R319.1 Premises identification.** Address numbers shall be provided on new or renovated buildings as required in Chapter 84 of the Harford County Code."

[(16) New Section R325 is added as follows:

**"SECTION R325**

**CARBON MONOXIDE DETECTORS**

**R325.1 Carbon monoxide detectors.** Carbon monoxide detectors shall be installed as required by the Public Safety Article, Title 12, Subtitle 11 of the Annotated Code of Maryland."

(17) Subsection R404.1, Table R404.1(1), Table R404.1(2) and Table R404.1(3) are deleted and the following is inserted in lieu thereof:

"**R404.1 Concrete and masonry foundation walls.** Concrete and masonry foundation walls shall be selected and constructed in accordance with the provisions of Section R404 or in accordance with ACI 318, ACI 332, NCMATR68-A or ACI 530/ASCE 5/TMS 402 or other approved structural standards. When ACI 318, ACI 332 or ACI 530/ASCE 5/TMS 402 or the provisions of Section R404 are used to design concrete or masonry foundation walls, project drawings, typical details and specifications are not required to bear the seal of the architect or engineer responsible for design, unless otherwise required by the state law of the jurisdiction having authority."

(18)][(14) Subsection R405.1 is amended by adding "in accordance with the Harford County Plumbing Code" after the word "system" in the seventh line.

[(19)](15) Subsection R405.1 is amended by deleting the exception at the end of the subsection.

[(20)](16) Subsection R506.2.2 is amended by deleting the exception at the end of the subsection.

[(21) Subsections R602.10 through R602.11.3 are deleted and the following subsections are inserted in lieu thereof:

(a) **R602.10 Wall bracing.** All exterior walls shall be braced in accordance with this section. In addition, interior braced wall lines shall be provided in accordance with Section R602.10.1. Where a building, or portion thereof, does not comply with one or more of the bracing requirements in this section, those portions shall be designed and constructed in accordance with accepted engineering practice.

**Exception:** Detached one- and two-family dwellings located in seismic design category c are exempt from the seismic bracing requirements of this section. Wind speed provisions for bracing shall be applicable to detached one- and two-family dwellings.

(b) **R602.10.1 Braced wall lines.** Braced wall lines, both interior and exterior, shall be provided with braced wall panels in the percentage and location specified in this section. Braced wall panels shall be in accordance with one of the bracing methods specified in Section R602.10.2, the alternate braced wall method of Section R602.10.3.2, or the continuous structural panel sheathing method of Section R602.10.4. Bracing method shall be permitted to vary as follows:

[1] Variation in bracing method from story to story is permitted.

[2] Variation in bracing method from braced wall line to braced wall line within a story is permitted, except that continuous structural panel sheathing shall conform to the additional requirements of Section R602.10.4.

[3] In seismic design categories a and b, and detached dwellings in seismic design category c, variation in bracing method within a braced wall line is permitted. The required sheathing percentage for the braced wall line with mixed sheathing types shall have the higher bracing percentage, in accordance with Table R602.10.1(1), of all types of bracing used. Wall lines using continuous wood structural panel sheathing shall conform to the additional requirements of Section R602.10.4.

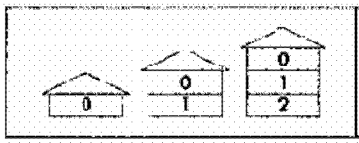
(c) **R602.10.1.1 Percentage of bracing.** The percentage of bracing along each braced wall line shall be in accordance with Table R602.10.1(1) and shall be the greater of that required by the seismic design category or the design wind

speed. Adjustments to the percent of braced wall specified in Table R602.10.1(1) shall be as specified in Table R602.10.1(2).

TABLE R602.10.1(1)[a,b,c]
WALL BRACING

| SEISMIC DESIGN CATEGORY (SDC) OR WIND SPEED | STORIES ABOVE BRACED WALL LINE[d] | METHOD OF BRACING PERMITTED | PERCENTAGE OF FULL-HEIGHT BRACING PER WALL LINE | | MAXIMUM SPACING BETWEEN BRACED WALL LINES (FT) |
|---|---|---|---|---|---|
| | | | For Method 3 Bracing | For other methods permitted[e] | |
| SDC A and B ($S_s$ 0.35g and $S_{ds}$ 0.33g), 100 mph | 0 | Methods 1-8 | 16% | 16% | 35 (See Section R602.10.1.4 for exceptions) |
| | 1 | Methods 1-8 | 16% | 25% | |
| | 2 | Methods 2-8 | 25% | 35% | |
| SDC C ($S_s$ 0.6g and $S_{ds}$ 0.53g), < 110 mph | 0 | Methods 1-8 | 16% | 25% | |
| | 1 | Methods 2-8 | 30% | 45% | |
| | 2 | Methods 2-8 | 45% | 60% | |
| SDC $D_0$ & $D_1$ ($S_s$ 1.25g and $S_{ds}$ 0.83g), < 110 mph | 0 | Methods 2-8 | 20% | 30% | 25 (See Section R602.10.1.4.1 for exceptions) |
| | 1 | Methods 2-8 | 45% | 60% | |
| | 2 | Methods 2-8 | 60% | 85% | |
| SDC $D_2$, < 110 mph | 0 | Methods 2-8 | 25% | 40% | |
| | 1 | Methods 2-8 | 55% | 75% | |
| | Cripple wall | Method 3 | 75% | Not Permitted | |

a. Wall bracing percentages are based on a soil site class "D." Interpolation of bracing percentage between the $S_{ds}$ values associated with the Seismic Design Categories shall be permitted when a site-specific $S_{ds}$ value is determined in accordance with Section 1613.5 of the *International Building Code*.
b. Foundation cripple wall panels shall be braced in accordance with Section R602.10.8.
c. Methods of bracing shall be as described in Section R602.10.2. The alternate braced wall panels described in Section R602.10.3.2 shall also be permitted
d. Stories above braced wall line. 0 = one story or top of two or three story. 1 = first story of two story or second story of three story. 2 = first story of three story.




0 = one story or top of two- or three-story
1 = first story of two-story or second story of three-story
2 = first story of three-story

e. Method 1 bracing exempt from percentage bracing requirement.

TABLE R602.10.1(2)
ADJUSTMENT FACTORS TO THE PERCENTAGE OF REQUIRED WALL BRACING[a]

| ADJUSTMENT BASED ON: | | | MULTIPLY PERCENTAGE OF BRACING PER WALL LINE BY: | APPLIES TO: |
|---|---|---|---|---|
| Story height[b] (Section 301.3) | | 10 ft | 1.0 | All bracing methods - R602.10.2 |
| | | > 10 12 ft | 1.2 | |
| Braced wall line spacing in SDC A-C[b,d] | | 35 ft | 1.0 | |
| | | > 35 50 ft | 1.43 | |
| Wall dead load[e] | | > 8 15 | 1.0 | |
| | | 8 psf | 0.85 | |
| Roof/ceiling dead load for wall supporting[b,c]: | roof only or roof plus one story | 15 psf | 1.0 | |
| | roof only | > 15 psf 25 psf | 1.1 | |
| | roof plus one story | > 15 psf 25 psf | 1.2 | |
| Walls with stone or masonry veneer in SDC C-$D_2$ | | See Section R703.7, Exception 1-4 | | |
| Cripple walls | | See Section R 602.10.8 | | |

a. The total percentage of bracing required for a given wall line is the product of all applicable adjustment factors.
b. Linear interpolation shall be permitted.
c. Bracing required for a site's wind speed shall not be adjusted for dead load.
d. Braced wall line spacing in excess of 35-ft shall be in accordance with R602.10.1.4.
e. The adjusted percentage of bracing shall not be less than that required for the site's wind speed.

(d) **R602.10.1.2 Angled corners.** At corners, braced wall lines shall be permitted to angle out of plane up to 45 degrees with a maximum diagonal length of 8 feet (2,438 mm). When determining the percentage of bracing, the length of each braced wall line shall be determined as shown in Figure R602.10.1.2. The placement of bracing for the braced wall lines shall begin at the point where the braced wall line, which contains the angled wall adjoins the adjacent braced wall line (Point A as shown in Figure R602.10.1.2). Where an angled corner is constructed at an angle equal to 45 degrees and the diagonal length is no more than 8 feet (2,438 mm) in length, the angled wall may be considered as part of either of the adjoining braced wall lines, but not both. Where the diagonal length is greater than eight feet (2,438 mm), it shall be considered its own braced wall line and be braced in accordance with Section R602.10.1 and methods in Section R602.10.2.

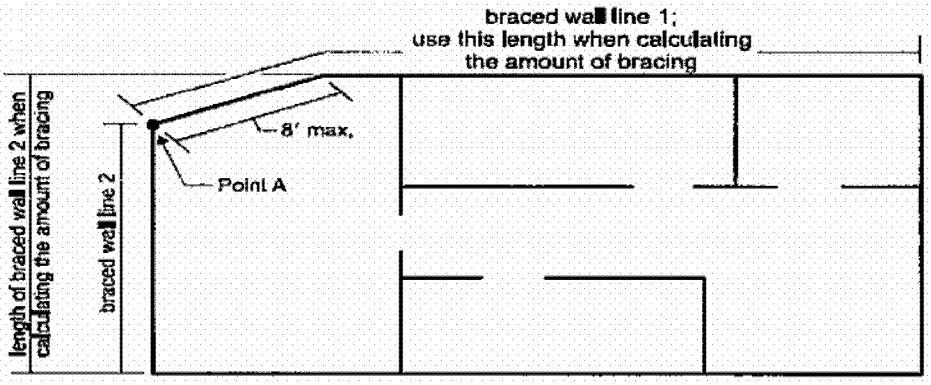



FIGURE R602.10.1.2
ANGLED CORNERS

(e) **R602.10.1.3 Braced wall panel location.** Braced wall panels shall be located in accordance with Table R602.10.1(1) and Figure R602.10.1.3(1). Braced wall panels shall be located at least every 25 feet on center and shall begin no more than 12.5 feet (3,810 mm) from each end of a braced wall line in accordance with Figure R602.10.1.3(2). Braced wall panels may be offset out-

of-plane up to 4 feet (1,219 mm) provided that the total out-to-out offset in any braced wall line is not more than 8 feet (2,438 mm) in accordance with Figure R602.10.1.3(3).

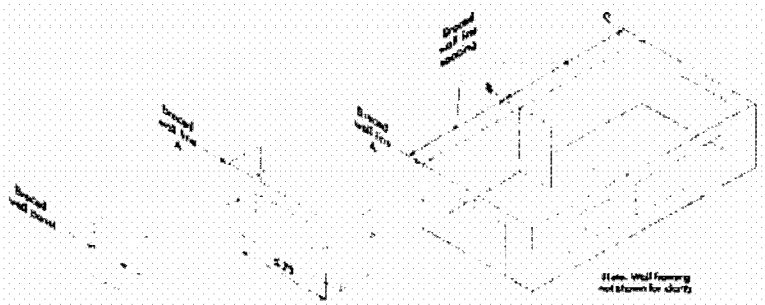


FIGURE R602.10.1.3 (1)
BRACED WALL PANELS AND BRACED WALL LINES

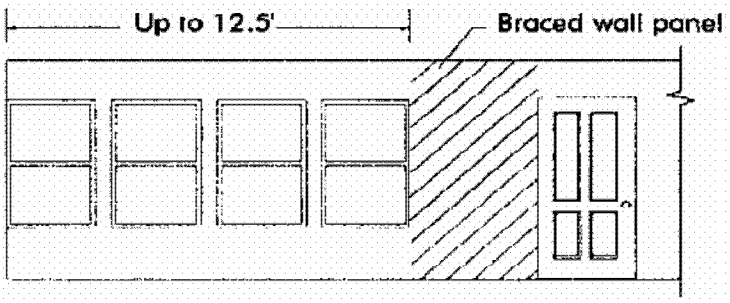



FIGURE R602.10.1.3(2)
PERMITTED BRACED WALL PANEL DISTANCES FROM ENDS OF
A BRACED WALL LINE (SDC A, B and C)

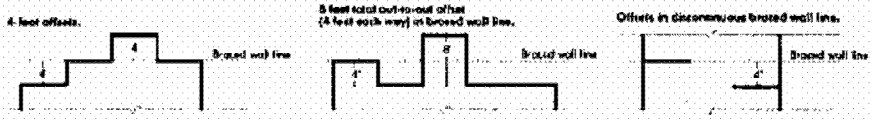


FIGURE R602.10.1.3(3)
OFFSETS PERMITTED FOR BRACED WALL LINES

(f) **R602.10.1.4. Braced wall line spacing.** Spacing of braced wall lines shall not exceed 35 feet (10,668 mm) on center in both the longitudinal and transverse direction in each story.

**Exception:** Spacing of braced wall lines not exceeding 50 feet (15,240 mm) shall be permitted where:

1. The wall bracing provided equals or exceeds the percentage of bracing required by Table R602.10.1(1) multiplied by a factor equal to the braced wall line spacing divided by 35 feet (10,668 mm); and

2. The length-to-width ratio for the floor/roof diaphragm as measured between braced wall lines does not exceed 3:1.

(g) **R602.10.2 Braced wall panel construction methods.** The construction of braced wall panels shall be in accordance with one of the following methods:

[1] Nominal 1-inch-by-4-inch (19.1 mm by 88.9 mm) continuous diagonal braces let in to the top and bottom plates and the intervening studs or approved metal strap devices installed in accordance with the manufacturer's specifications. The let-in bracing shall be placed at an angle not more than 60 degrees (1.06 rad) or less than 45 degrees (0.79 rad) from the horizontal.

[2] Wood boards of 5/8-inch (15.9 mm) net minimum thickness applied diagonally on studs spaced a maximum of 24 inches (610 mm). Diagonal boards shall be attached to studs in accordance with Table R602.3(1).

[3] Wood structural panel sheathing with a thickness not less than 3/8 inch (9.5 mm) for 16-inch (406 mm) or 24-inch (610 mm) stud spacing. Wood structural panels shall be installed in accordance with Table R602.3(3) and Table R602.3(1).

[4] One-half-inch (12.7 mm) or 25/32-inch (19.8 mm) thick structural fiberboard sheathing applied vertically or horizontally on studs spaced a maximum of 16 inches (406 mm) on center. Structural fiberboard sheathing shall be installed in accordance with Table R602.3(1).

[5] Gypsum board with minimum 1/2-inch (12.7 mm) thickness placed on

studs spaced a maximum of 24 inches (610 mm) on center and fastened at panel edges including top and bottom plates at seven inches (178 mm) on center with the size nails specified in Table R602.3(1) for sheathing and Table R702.3.5 for interior gypsum board.

[6] Particle board wall sheathing panels installed in accordance with Table R602.3(4) and Table R602.3(1).

[7] Portland cement plaster on studs spaced a maximum of 16 inches (406 mm) on center and installed in accordance with Section R703.6.

[8] Hardboard panel siding when installed in accordance with Table R703.4.

**Exception:** Alternate braced wall panels constructed in accordance with Sections R602.10.3.2.1 or R602.10.3.2.2 shall be permitted to replace any braced wall panel in any of the above methods of braced wall panels.

(h) **R602.10.2.1 Braced wall panel interior finish material.** Braced wall panels shall have gypsum wall board installed on the side of the wall opposite the bracing material. Gypsum wall board shall be not less than 1/2 inch (12.7 mm) in thickness and be fastened in accordance with Table R702.3.5 for interior gypsum wall board.

**Exceptions:**

1. Wall panels that are braced in accordance with Method 5.
2. Wall panels that are braced in accordance with Section R602.10.3.2.
3. When an approved interior finish material with an in-plane shear resistance equivalent to gypsum board is installed.
4. For Methods 2, 3, 4, 6, 7 and 8, gypsum wall board is permitted to be omitted provided the percentage of bracing in Table R602.10.1(1) is multiplied by a factor of 1.5.

(i) **R602.10.3 Minimum length of braced panels.** For Methods 2, 3, 4, 6, 7 and 8 above, each braced wall panel shall be at least 48 inches (1,219 mm) in length, covering a minimum of three stud spaces where studs are spaced 16 inches (406 mm) on center and covering a minimum of two stud spaces where studs are spaced 24 inches (610 mm) on center. For Method 5 above, each braced wall panel and shall be at least 96 inches (2,438 mm) in length where applied to one face of a braced wall panel and at least 48 inches (1,219 mm) where applied to both faces. For Methods 2, 3, 4, 6, 7 and 8, for purposes of computing the percentage of panel bracing required in Table R602.10.1(1), the effective length of the braced wall panel shall be equal to the actual length of the panel. When Method 5 panels are applied to only one face of a braced wall panel, bracing percentages required in Table R602.10.1(1) for Method 5 shall be doubled.

**Exceptions:**

1. Lengths of braced wall panels for continuous wood structural panel sheathing shall be in accordance with Section R602.10.4.
2. Lengths of alternate braced wall panels shall be in accordance with Section R602.10.3.2.1 or Section R602.10.3.2.2.
3. For Methods 2, 3, 4, 6, 7 and 8 in seismic design categories A, B and C: Panels between 36 inches and 48 inches in length shall be permitted to count towards the required percentage of bracing in Table R602.10.1(1), and the effective contribution shall comply with Table R602.10.3.

TABLE R602.10.3
EFFECTIVE LENGTHS FOR BRACE WALL PANELS LESS THAN 48 INCHES IN ACTUAL LENGTH (BRACE METHODS 2, 3, 4, 6, 7, AND 8[a]

| Actual Length of Braced Wall Panel (inches) | Effective Length of Braced Wall Panel (inches) | | |
|---|---|---|---|
| | 8-foot Wall Height | 9-foot Wall Height | 10-foot Wall Height |
| 48 | 48 | 48 | 48 |
| 42 | 36 | 36 | N/A |
| 36 | 27 | N/A | N/A |

For SI: 1 inch = 25.4mm
Interpolation shall be permitted.

(j) **R602.10.3.1 Adjustment of length of braced panels.** When story height (h), measured in ft, exceeds 10 feet (3,048 mm), in accordance with Section R301.3, the minimum length of braced wall panels specified in Section R602.10.3 shall be increased by a factor H/10. See Table R602.10.3.1. Interpolation is permitted.

TABLE R602.10.3.1
MINIMUM LENGTH REQUIREMENTS FOR BRACED WALL PANELS

| SEISMIC DESIGN CATEGORY AND WIND SPEED | BRACING METHOD | HEIGHT OF BRACED WALL PANEL | | | | |
|---|---|---|---|---|---|---|
| | | 8 ft. | 9 ft. | 10 ft. | 11 ft. | 12 ft. |
| SDC A, B, C, $D_0$, $D_1$ and $D_2$ Wind speed < 110 mph | 2,3,4,6,7,8 and Method 5 when double sided | 4'-0" | 4'-0" | 4'-0" | 4'-5" | 4'-10" |
| | Method 5, single sided | 8'-0" | 8'-0". | 8'-0" | 8'-10" | 9'-8" |

For SI: 1 inch = 25.4mm, 1 foot = 305 mm

(k) **R602.10.3.2 Alternative bracing panels.** As an alternate to the bracing methods in Section R602.10.2, wall bracing panels in accordance with Sections R602.10.3.2.1 and R602.10.3.2.2 shall be permitted.

(l) **R602.10.3.2.1 Alternate braced wall panels.** Alternate braced wall panels constructed in accordance with one of the following provisions shall be permitted to replace each 4 feet (1,219 mm) of braced wall panel as required by Section R602.10.3. The maximum height and minimum length and tie-down force of each panel shall be in accordance with Table R602.10.3.2.1:

[1] In one-story buildings, each panel shall be sheathed on one face with 3/8-inch-minimum-thickness (9.5 mm) wood structural panel sheathing nailed with 8D common or galvanized box nails spaced in accordance with Table R602.3(1) and blocked at all wood structural panel sheathing edges. Two anchor bolts installed in accordance with Figure R403.1(1) shall be provided in each panel. Anchor bolts shall be

placed 6 to 12 inches from each end of the plate. Each panel end stud shall have a tie-down device fastened to the foundation, capable of providing an uplift capacity in accordance with Table R602.10.3.2.1. The tie-down device shall be installed in accordance with the manufacturer's recommendations. The panels shall be supported directly on a foundation or on floor framing supported directly on a foundation, which is continuous across the entire length of the braced wall line. This foundation shall be reinforced with not less than one No. 4 bar top and bottom. When the continuous foundation is required to have a depth greater than 12 inches (305 mm), a minimum 12-inch-by-12-inch (305 mm by 305 mm) continuous footing or turned down slab edge is permitted at door openings in the braced wall line. This continuous footing or turned down slab edge shall be reinforced with not less than one No. 4 bar top and bottom. This reinforcement shall be lapped 15 inches (381 mm) with the reinforcement required in the continuous foundation located directly under the braced wall line.

[2] In the first story of two-story buildings, each braced wall panel shall be in accordance with Item 1 above, except that the wood structural panel sheathing edge nailing spacing shall not exceed 4 inches on center.

**TABLE R602.10.3.2.1**
**MINIMUM LENGTH REQUIREMENTS AND TIE-DOWN FORCES FOR ALTERNATE BRACED WALL PANELS**

| SEISMIC DESIGN CATEGORY AND WIND SPEED | | HEIGHT OF BRACED WALL PANEL | | | | |
|---|---|---|---|---|---|---|
| | | 8 ft. | 9 ft. | 10 ft. | 11 ft. | 12 ft. |
| SDC A, B and C Wind speed < 110 mph | Minimum Sheathed Length | 2'-4" | 2'-8" | 2'-10" | 3'-2" | 3'-6" |
| | R602.10.3.2.1, Item 1 Tie-down Force (lbs) | 1800 | 1800 | 1800 | 2000 | 2200 |
| | R602.10.3.2.1, Item 2 Tie-down Force (lbs) | 3000 | 3000 | 3000 | 3300 | 3600 |
| SDC $D_3$, $D_1$ and $D_2$ Wind speed < 110 mph | Minimum Sheathed Length | 2'-8" | 2'-8" | 2'-10" | NP[a] | NP[a] |
| | R602.10.3.2.1, Item 1 Tie-down Force (lbs) | 1800 | 1800 | 1800 | NP[a] | NP[a] |
| | R602.10.3.2.1, Item 2 Tie-down Force (lbs) | 3000 | 3000 | 3000 | NP[a] | NP[a] |

For SI: 1 inch = 25.4 mm, 1 foot = 305 mm, 1 pound = 4.44822 Newtons
a. NP = Not Permitted. Maximum height of 10 feet (3,048 mm).

(m) **R602.10.3.2.2 Alternate bracing wall panel adjacent to a door or window opening.** Alternate braced wall panels constructed in accordance with one of the following provisions are also permitted to replace each 4 feet (1,219 mm) of braced wall panel as required by Section R602.10.3 for use adjacent to a window or door opening with a full-length header:

[1] In one-story buildings, each panel shall have a length of not less than 16 inches (406 mm) and a height of not more than 10 feet (3,048 mm). Each panel shall be sheathed on one face with a single layer of 3/8-inch minimum-thickness (9.5 mm) wood structural panel sheathing nailed with 8D common or galvanized box nails in accordance with Figure R602.10.3.2.2. The wood structural panel sheathing shall extend up over the solid sawn or glued-laminated header and shall be nailed in accordance with Figure R602.10.3.2.2. A built-up header consisting of at least 2 two by 12s and fastened in accordance with Table R602.3(1) shall be permitted to be used. A spacer, if used, shall be placed on the side of the built-up beam opposite the wood structural panel sheathing. The header shall extend between the inside faces of the first full-length outer studs of each panel. The clear span of the header between the inner studs of each panel shall be not less than 6 feet (1,829 mm) and not more than 18 feet (5,486 mm) in length. A strap with an uplift capacity of not less than 1;000 pounds (4,448 n) shall fasten the header to the side of the inner studs opposite the sheathing. One anchor bolt not less than 5/8-inch-diameter (16 mm) and installed in accordance with Section R403.1.6 shall be provided in the center of each sill plate. The studs at each end of the panel shall have a tie-down device fastened to the foundation with an uplift capacity of not less than 4,200 pounds

(18,683 n). The tie-down devices shall be an embedded-strap type, installed in accordance with the manufacturer's recommendations. Where a panel is located on one side of the opening, the header shall extend between the inside face of the first full-length stud of the panel and the bearing studs at the other end of the opening. A strap with an uplift capacity of not less than 1,000 pounds (4,448 n) shall fasten the header to the bearing studs. The bearing studs shall also have a tie-down device fastened to the foundation with an uplift capacity of not less than 1,000 pounds (4,448 n). The panels shall be supported directly on a foundation, which is continuous across the entire length of the braced wall line. The foundation shall be reinforced with not less than one No. 4 bar top and bottom. Where the continuous foundation is required to have a depth greater than 12 inches (305 mm), a minimum 12-inch-by-12-inch (305 mm by 305 mm) continuous footing or turned down slab edge is permitted at door openings in the braced wall line. This continuous footing or turned down slab edge shall be reinforced with not less than one No. 4 bar top and bottom. This reinforcement shall be lapped not less than 15 inches (381 mm) with the reinforcement required in the continuous foundation located directly under the braced wall line.

[2] In the first story of two-story buildings, each wall panel shall be braced in accordance with Item 1 above, except that each panel shall have a length of not less than 24 inches (610 mm).

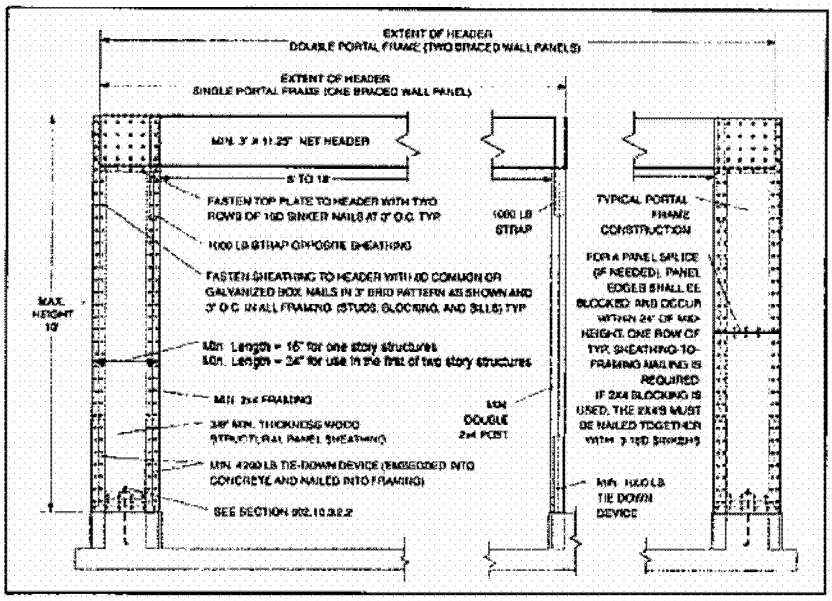



FIGURE R602.10.3.2.2
ALTERNATE BRACED WALL PANEL ADJACENT TO A DOOR OR WINDOW OPENING

For SI: 1 inch = 25.4 mm, 1 foot = 305 mm

(n) **R602.10.4 Continuously-sheathed braced wall line using Method 3 (wood structural panel).** Continuously-sheathed braced wall lines using wood structural panels shall comply with this section. Different bracing methods shall not be permitted within a continuously-sheathed braced wall line. Other bracing methods prescribed by this code shall be permitted on other braced wall lines on the same story level or on different story levels of the building.

**Exception:** All exterior braced wall lines shall be continuously sheathed where required by Section R602.10.4.7.

(o) **R602.10.4.1 Continuously-sheathed braced wall line requirements.** Continuously-sheathed braced wall lines shall be in accordance with Figure R602.10.4(1) and shall comply with all of the following requirements:

[1] Structural sheathing shall be applied to all exterior sheathable surfaces of a braced wall line including areas above and below openings.

[2] Only full-height braced wall panels shall be used for calculating the braced wall percentage in accordance with Table R602.10.1(1).

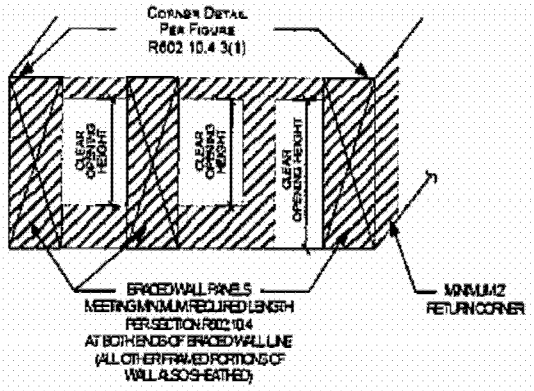



FIGURE R602.10.4(1)
CONTINUOUSLY-SHEATHED BRACED WALL LINE

(p) **R602.10.4.2 Braced wall panel length.** In a continuously-sheathed wood structural panel braced wall line, the minimum braced wall panel length shall be permitted to be in accordance with Table R602.10.4.2.

TABLE R602.10.4.2
LENGTH REQUIREMENTS FOR BRACED WALL PANELS IN A CONTINUOUSLY SHEATHED WALL [a]

| MINIMUM LENGTH OF BRACED WALL PANEL (Inches) | | | MINIMUM OPENING CLEAR HEIGHT NEXT TO THE BRACED WALL PANEL (% of wall height) |
|---|---|---|---|
| 8-foot wall | 9-foot wall | 10-foot wall | |
| 48 | 54 | 60 | 100% |
| 32 | 36 | 40 | 85% |
| 24 | 27 | 30 | 67% |

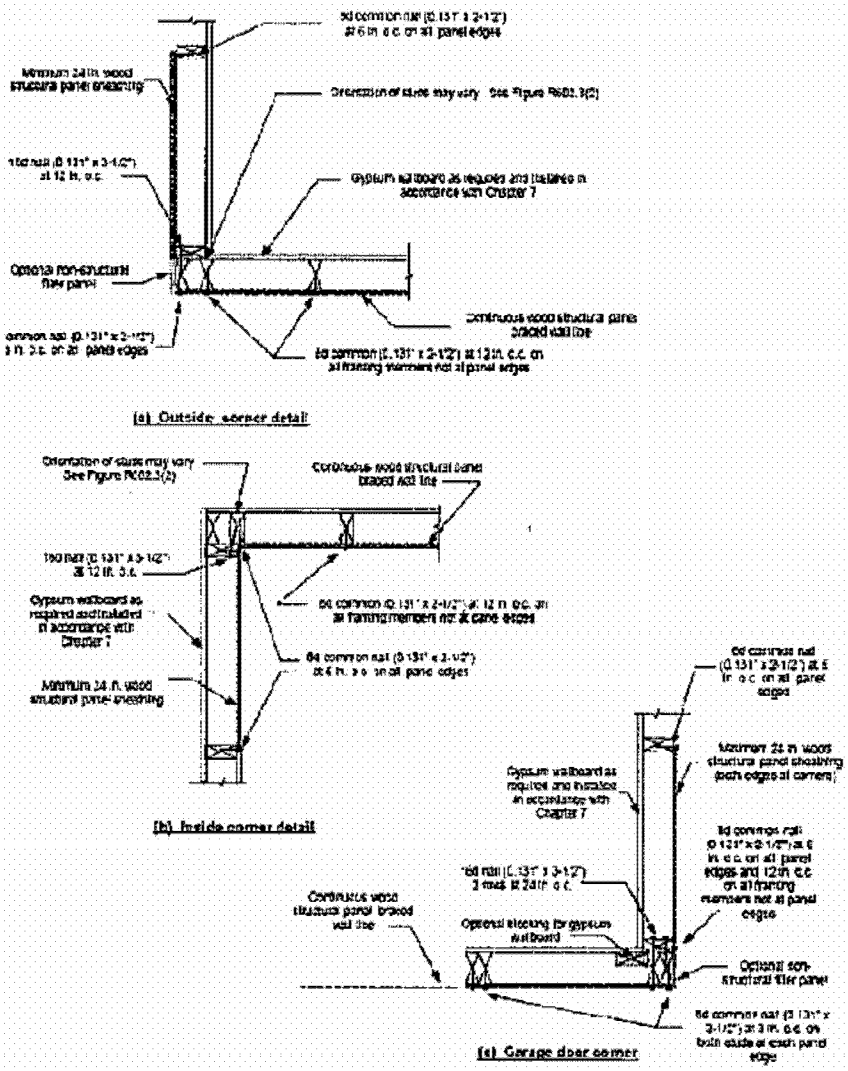
For SI: 1 inch = 25.4 mm, 1 foot = 305 mm
a. Interpolation shall be permitted.

(q) **R602.10.4.3 Braced wall panel location and corner construction.** A braced wall panel shall be located at each end of a continuously-sheathed braced wall line. A minimum 24-inch (610 mm) wood structural panel corner return shall be provided at both ends of a continuously-sheathed braced wall line in accordance with Figure R602.10.4.3(1). In lieu of the corner return, a tie-down device with a minimum uplift design value of 800 lb shall be fastened to the corner stud and to the foundation or framing below in accordance with Figure R602.10.4.3(2).

**Exception:** The first braced wall panel shall be permitted to begin 12 feet 6 inches (3,810 mm) from each end of the braced wall line in seismic design categories a, b and c and 8 feet in seismic design categories d0, d1 and d2

provided one of the following is satisfied:

1. A minimum 2-foot-long (610 mm), full-height wood structural panel is provided at both sides of a corner constructed in accordance with Figure R602.10.4.3(1) at the braced wall line ends in accordance with Figure R602.10.4.3(3); or
2. The braced wall panel closest to the corner shall have a tie-down device with a minimum uplift design value of 800 lb (36 kg) fastened to the stud at the edge of the braced wall panel closest to the corner and to the foundation or framing below in accordance with Figure R602.10.4.3(4).




(a) Outside corner detail

(b) Inside corner detail

(c) Garage door corner

FIGURE R602.10.4.3(1)
TYPICAL EXTERIOR CORNER FRAMING FOR CONTINUOUS STRUCTURAL PANEL SHEATHING SHOWING REQUIRED STUD-TO-STUD NAILING

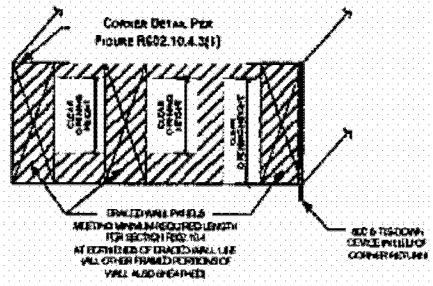



FIGURE R602.10.4.3(2)
CONTINUOUSLY SHEATHED BRACED WALL LINE – WITHOUT CORNER RETURN

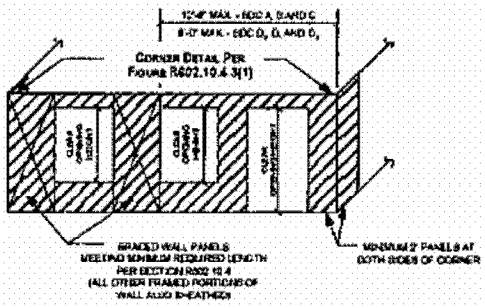



FIGURE R602.10.4.3(3)
CONTINUOUSLY SHEATHED BRACED WALL LINE – FIRST
BRACED WALL PANEL AWAY FROM END OF WALL LINE WITHOUT TIE DOWN

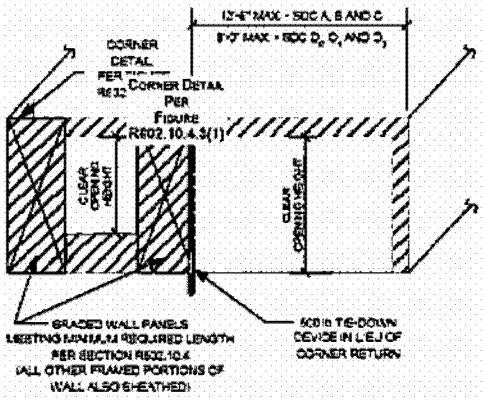



FIGURE R602.10.4.3(4)
CONTINUOUSLY SHEATHED BRACED WALL LINE – FIRST BRACED
WALL PANEL AWAY FROM END OF WALL LINE WITH TIE DOWN

(r) **R602.10.4.4 Braced wall percentage.** In addition to bracing percentage adjustments specified elsewhere in this code, the braced wall percentages for Method 3 from Table 602.10.1(1) shall be permitted to be multiplied by a factor

in accordance with Table R602.10.4.4.

TABLE R602.10.4.4
ADJUSTMENT FACTORS TO THE PERCENTAGE OF REQUIRED BRACING PER WALL LINE – CONTINUOUSLY SHEATHED

| ADJUSTMENT BASED ON MAXIMUM WALL CLEAR OPENING HEIGHT: | | MULTIPLY PERCENTAGE OF BRACING PER WALL LINE BY: |
|---|---|---|
| Continuous wood structural panel sheathing when maximum opening height in wall line does not exceed [a] (Section 301.2.2.2.1) | 85% of wall height | 0.9 |
| | 67% of wall height | 0.8 |

a. Percentage of bracing for continuous wood structural panel sheathing shall be based on Method 3 requirements.

(s) **R602.10.4.5 4:1 Aspect ratio segments at garage door openings used with continuous structural panel sheathing.** A 4:1 aspect ratio shall be permitted for full-height sheathed wall segments on either side of garage openings that support light frame roofs only, with roof covering dead loads of 3 psf (0.14 kn/m2) or less. For purposes of calculating the percentage of panel bracing required by Table R602.10.1(1), the length of the full-height sheathing segment shall be equal to its measured length. This option is limited to one wall of the garage.

(t) **R602.10.4.6 6:1 aspect ratio segments used with continuous structural panel sheathing.** Wall segments having a maximum 6:1 height-to-width ratio shall be permitted to be built in accordance with Figure R602.10.4.6. The maximum 6:1 height-to-width ratio is based on height being measured from top of header to the bottom of the wall segment bottom-plate. For purposes of calculating the percentage of panel bracing required by Table R602.10.1(1), the width of the full-height sheathing segment shall be equal to its measured width. Corners at the ends of walls using this option shall be constructed in accordance with Figure R602.10.4.3(1). The reduction factors for continuously braced walls from Section R602.10.4.4 shall be applied when calculating applicable percentages of wall bracing. The number of wall segments having a maximum 6:1 height-to-width ratio in a wall line shall not exceed four. In multi-story buildings, wall segments having a maximum 6:1 height-to-width ratio are not

permitted to be directly stacked vertically. For purposes of resisting wind pressures acting perpendicular to the wall, in accordance with Section R301.2, the minimum requirements of Figure R602.10.4.6 shall be sufficient for wind speeds less than 110 mph in exposure category b. For exposure categories c and d, the header to jack stud strap requirements and the number of additional jack studs shall be in accordance with Table R602.10.4.6.

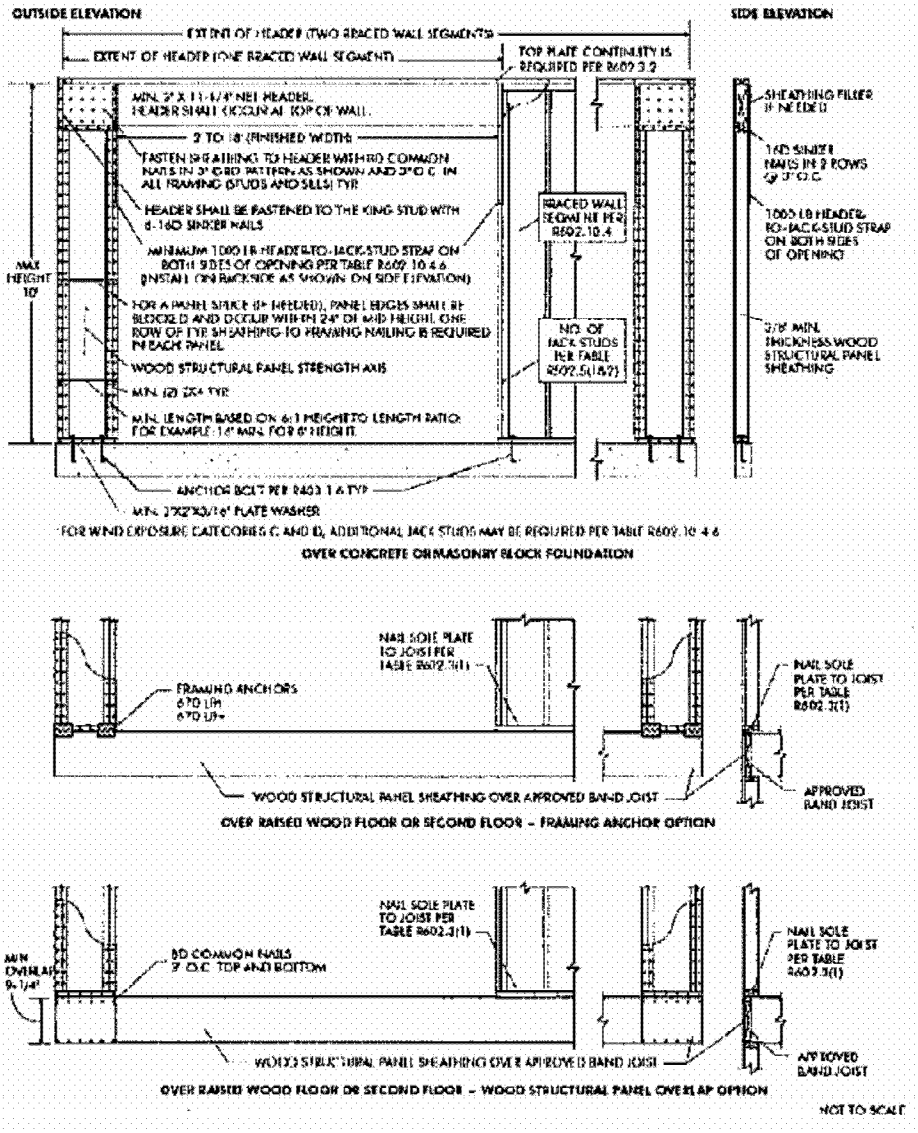



FIGURE R602.10.4.6
WALLS WITH 6:1 ASPECT RATIO USED WITH CONTINUOUS WOOD STRUCTURAL PANEL SHEATHING

TABLE R602.10.4.6
HEADER TO JACK STUD STRAP AND THE NUMBER OF ADDITIONAL JACK STUDS REQUIRED FOR RESISTING WIND PRESSURES PERPENDICULAR TO 6:1 ASPECT RATIO WALLS LOCATED IN WIND EXPOSURE CATEGORIES C AND D

| Required | Wall Height (ft) | Wind Exposure Category C | | | Wind Exposure Category D | | |
|---|---|---|---|---|---|---|---|
| | | 85 mph | 90 mph | less than 110 mph | 85 mph | 90 mph | less than 110 mph |
| Strap Capacity(lb)[a] | 10 and less | 1000 | 1200 | 2375 | 1375 | 1750 | 3050 |
| Number of additional 2x4 Jack Studs[b] | 8 | -- | -- | -- | -- | -- | 1 |
| | 9 | -- | -- | 1 | -- | 1 | 2 |
| | 10 | -- | 1 | 2 | 1 | 2 | 3 |

a. If 2x6 framing is used, then the required strap capacity may be multiplied by 0.65, but in no case shall the required strap capacity be less than 1,000 lb.
b. If 2x6 framing is used, then no additional framing shall be required.

(u) **R602.10.5 Braced wall panel support.** Braced wall panels shall be supported on floor framing or foundations as follows:

[1] Where joists are perpendicular to braced wall lines above or below, blocking shall be provided between the joists at braced wall panel locations to permit fastening of wall plates in accordance with Table R602.3(1).

[2] Where joists are parallel to braced wall lines above or below, a rim joist or other parallel framing member shall be provided at the wall to permit fastening of wall plates in accordance with Table R602.3(1).

[3] Braced wall panels shall be permitted to be supported on cantilevered floor joists meeting the cantilever limits of Section R502.3.3 provided joists are blocked at the nearest bearing wall location, except such blocking shall not be required in seismic design categories a, b and c for cantilevers not exceeding 24 inches (610 mm) where a full-height rim joist is provided.

[4] Elevated post or pier foundations supporting braced wall panels shall be designed in accordance with accepted engineering practice.

(v) **R602.10.6 Interior braced wall support.** In seismic design categories a through d1, interior braced wall lines shall be supported as provided in Section R502.4.

(w) **R602.10.7 Panel joints.** All vertical joints of panel sheathing shall occur over

and be fastened to common studs. Horizontal joints in braced wall panels shall occur over and be fastened to common blocking of a minimum 1-1/2 inch (38 mm) thickness.

**Exceptions:**

1. Blocking at horizontal joints shall not be required in wall segments that are not counted as braced wall panels.
2. Where the bracing percentage provided is at least twice the minimum percentage required by Table R602.10.1(1) blocking at horizontal joints shall not be required in braced wall panels constructed using Methods 3, 4, 5, 6 or 8.

(x) **R602.10.8 Cripple wall bracing.** In seismic design categories other than d2, cripple walls shall be braced with a percentage and type of bracing as required for the wall above in accordance with Table R602.10.1(1) with the following modifications for cripple wall bracing:

[1] The percentage of bracing as determined from Table R602.10.1(1) shall be multiplied by a factor of 1.15; and

[2] The wall panel spacing shall be decreased to 18 feet (5,486 mm) instead of 25 feet (7,620 mm).

(y) **R602.10.8.1 Redesignation of cripple walls.** In any seismic design category, cripple walls shall be permitted to be redesignated as the first story walls for purposes of determining wall bracing requirements. If the cripple walls are redesignated, the stories above the redesignated story shall be counted as the second and third stories respectively.

(z) **R602.11 Wall anchorage.** Braced wall line sills shall be anchored to concrete or masonry foundations in accordance with Sections R403.1.6 and R602.11.1."]

[(22)](17) New Subsection [R703.9.3]R703.9.5 is added as follows:

"**[R703.9.3]R703.9.5 Special inspections.** Special inspections shall be required for all EIFS applications.

**Exceptions:**

1. Special inspections shall not be required for EIFS applications installed over a water-resistive barrier with a means of draining moisture to the exterior.
2. Special inspections shall not be required for EIFS applications installed over masonry or concrete walls."

(18) NEW SUBSECTION R903.2.3 IS ADDED AS FOLLOWS:

"**R903.2.3 DRIP EDGE.** PROVIDE DRIP EDGE AT EAVES AND GABLES OF SHINGLE ROOFS. OVERLAP TO BE A MINIMUM OF 2 INCHES (51 MM). EAVE DRIP EDGES SHALL EXTEND ¼ INCHES (6.4 MM) BELOW SHEATHING AND EXTEND BACK ON THE ROOF A MINIMUM OF 2 INCHES (51 MM). DRIP EDGE SHALL BE MECHANICALLY FASTENED A MAXIMUM OF 12 INCHES (305 MM) ON CENTER."

[(23)](19) New Subsection R903.4.2 is added as follows:

"**R903.4.2 Gutters and leaders.** Gutters and leaders shall be installed in accordance with the Harford County Plumbing Code. All rain leaders or extensions shall not discharge closer than 10 feet from any lot line so as not to be a nuisance to surrounding properties."

[(24) New Subsection R903.2.2 is added as follows:

"**R903.2.2 Drip edge.** Provide drip edge at eaves and gables of shingle roofs. Overlap to be a minimum of 2 inches (51 mm). Eave drip edges shall extend 1/4 inches (6.4 mm) below sheathing and extend back on the roof a minimum of 2 inches (51 mm). Drip edge shall be mechanically fastened a maximum of 12 inches (305 mm) on center."]

(20) CHAPTER 11 IS DELETED IN ITS ENTIRETY AND THE 2009 INTERNATIONAL ENERGY CONSERVATION CODE IS INSERTED IN LIEU THEREOF.

[(25)](21) Part VII, Chapters 25, 26, 27, 28, 29, 30, 31 and 32 are deleted and the Harford County Plumbing Code is inserted in lieu thereof EXCEPT FOR SUBSECTION P2904, DWELLING UNIT FIRE SPRINKLER SYSTEMS, WHICH SHALL REMAIN AS PART OF THIS CODE.

[(26)](22) Part VIII, Chapters 33, 34, 35, 36, 37, 38, 39, 40, 41 and 42 are deleted and the Harford County Electrical Code is inserted in lieu thereof.

[(27)](23) Subsection AE101.1 is amended by deleting the sentence "These provisions shall be applicable only to a manufactured home used as a single dwelling unit installed on privately owned (nonrental) lots and shall apply to the following:" and inserting the following sentence in lieu thereof: "These provisions shall be applicable only to a manufactured home used as a single dwelling unit installed on private and rental lots and shall apply to the following:".

[(28)](24) Subsection AE201.1 is amended by deleting the definition of "manufactured home" and inserting the following in lieu thereof:

"**MANUFACTURED HOME**. Manufactured home means a structure, transportable in one or more sections, which in the traveling mode is [eight]8 body feet or more in width or [forty]40 body feet or more in length or, when erected on site, is [three hundred twenty]320 or more square feet, and which is built on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities, and includes the plumbing, heating, air-conditioning and electrical systems contained therein. Calculations used to determine the number of square feet in a structure will be based on the structure's exterior dimensions measured at the largest horizontal projections when erected on site. These dimensions will include all expandable room, cabinets and other projections containing interior spaces,

but do not include bay windows. This term includes all structures which meet the above requirements except the size requirements and with respect to which the manufacturer voluntarily files a certification pursuant to § 3282.13 and complies with the standards set forth in Part 3280.

NOTE: For mobile homes built prior to June 15, 1976, a label certifying compliance to the standard for mobile home, NFPA 501, ANSI 119.1, in effect at the time of manufacture is required. For the purpose of these provisions, a mobile home shall be considered a manufactured home."

[(29)](25) Subsection AE201.1 is amended by deleting the definition of "privately owned (nonrental) lot" and inserting the following in lieu thereof:

"**PRIVATELY OWNED (NONRENTAL) LOT.** A parcel of real estate outside of a manufactured home rental community (park) where the land and the manufactured home to be installed thereon are held in common ownership."

[(30)](26) Subsection AE201.1 is amended by adding the following definition:

"**RENTAL LOT.** A lot or space that is rented in an approved manufactured home community or park."

[(31)](27) Subsection AE201.1 is amended by adding the following definition:

"**INDUSTRIALIZED BUILDING.** As defined by Section 12-301(d) of the Public Safety Article, of the Annotated Code of Maryland, 'industrialized building' means a building assembly or system of building subassemblies manufactured in its entirety, or in substantial part, offsite and transported to the point of use for installation or erection, with or without other specified components, as a finished building or as a part of a finished building comprising two or more industrialized building units. An industrialized building need not have electrical, plumbing, heating, ventilating, insulation or other service systems; but when such systems are installed at the offsite manufacture or assembly point they shall be deemed a part of such building assembly

or system of building assemblies. Industrialized building does not include open frame construction which can be completely inspected onsite. An 'industrialized building' does not include a mobile home."

[(32)](28) Section AE301 is deleted in its entirety.

[(33)](29) Section AE302 is deleted in its entirety.

[(34)](30) Section AE303 is deleted in its entirety.

[(35)](31) Section AE304 is deleted in its entirety.

[(36)](32) Subsection AE602.1 is amended by adding the phrase "or ANSI A225.1-1994" in the last line of the last paragraph after the word "designer".

**[§ 82-5. Status of building permits applied prior to effective date of this article.**

This article shall not apply to buildings for which a valid building permit was applied for prior to the effective date of this article.

**§ 82-6. Saving clause.**

Nothing in this chapter hereby adopted shall be construed to affect any suit or proceedings impending in any court, or any rights acquired, or liability incurred, or any cause or causes of action acquired or existing, under any act or ordinance hereby repealed, nor shall any just or legal right or remedy of any character be lost, impaired or affected by this ordinance.]

**Article III. [2006]2009 International Mechanical Code**

**§ 82-[7]5. Adoption of [2006]2009 International Mechanical Code by reference.**

A. The [2006]2009 International Mechanical Code published by the International Code Council, Inc., is hereby adopted and by reference thereto is made a part of this chapter with the same force and effect as though set out in full herein, save and except such changes, amendments, revisions, deletions, subsections and/or additions as specified in this chapter. If conflicts with this code, or with changes, amendments, revisions, deletions, subsections and/or additions to that code are found elsewhere in the County Code, the most restrictive provisions shall govern.

B. At least one copy of this code and supplements thereto shall be on file and open for public use, examination and inspection in the office of the Director of Administration and in the office of the Council Administrator.

C. The requirements of this article shall not apply to the agricultural structures that do not require a building permit as specified on the Agricultural BuildingS PermitTING Requirements Table as shown in Attachment 1 in Chapter 82.

**§ 82-[8]6. Registration.**

A. As used in this code the term "provide heating, ventilation, air-conditioning or refrigeration services" shall mean "to install, maintain, alter, remodel or repair heating systems, cooling systems, refrigeration systems, ventilation systems or hydronic systems."

B. All persons that intend to "provide heating, ventilation, air-conditioning or refrigeration services" in Harford County shall be registered with the Division of Plumbing Services and shall have a current certificate of registration.

C. To obtain a certificate of registration, the applicant shall have been qualified and approved by the State of Maryland Board of Heating, Ventilation, Air Conditioning and Refrigeration Contractors.

D. Master, master restricted, limited heating, ventilation, air-conditioning and refrigeration certificate. Any applicant who applies for a master, master restricted or a limited heating, ventilation, air-conditioning and refrigeration certificate to perform mechanical services shall provide the following information:

(1) A current license number issued by the State of Maryland Board of Heating, Ventilation, Air Conditioning and Refrigeration Contractors.

(2) A current business address with phone number.

(3) A current certificate of insurance equal to or greater than such amount as required by the State of Maryland Board of Heating, Ventilation, Air Conditioning and Refrigeration Contractors.

E. Journeyman, apprentice certificate. Any applicant who applies for a journeyman or apprentice certificate to assist in performing mechanical services shall provide a current license number issued by the State of Maryland Board of Heating, Ventilation, Air Conditioning and Refrigeration Contractors.

F. Fees for certificate of registration shall be as set forth in Chapter 157 of the Harford County Code, as amended.

G. Master, master restricted and limited heating, ventilation, air-conditioning and refrigeration certificates issued pursuant to this section shall expire on April 30 of each even-numbered year, and all such certificates shall be issued for a 2-year period. All journeyman and apprentice certificates issued pursuant to this section shall expire on October 31 of each even-numbered year.

H. The administrative authority may, in its discretion, suspend or revoke the certificate of any person who makes any false or misleading statement in an application; who sells, lends or otherwise permits any improper use of a certificate, obtains permits for others to "provide heating, ventilation, air-conditioning or refrigeration services" or who commits any violation of the Harford County Mechanical Code.

I. Upon receipt of written requests directed to the administrative authority, the administrative authority, in its discretion, may suspend or revoke the certificate of any person who commits any violation of the Harford COUNTY Mechanical Code or any other law or regulation governing the conduct to provide heating, ventilation, air-conditioning or refrigeration services.

(1) No certificate shall be suspended or revoked except after a hearing before the administrative authority of which the certificate holder shall receive at least 5 days' notice, in writing, together with a statement of the charges. Upon such hearing, the administrative authority may suspend any certificate for such a period of time as it may find proper or may revoke same.

(2) In the event of a revocation, no application for the reinstatement of a revoked certificate

shall be entertained until the expiration of 6 months from the date of such revocation. At the end of such 6-month period, the administrative authority may, in its discretion, reinstate a revoked certificate.

J. Any certificate holder shall notify the administrative authority immediately of any changes in location of business, employer, phone number or insurance coverage.

K. Any certificate of insurance required to be submitted under this section shall provide that in the event the insurance required under this chapter is cancelled, the insurer shall notify the Harford County Division of Plumbing Services within 10 days after the date of cancellation.

**§ 82-[9]7. Permit applicants.**

A. No work regulated by this code shall be commenced without a permit being issued by the Department of Inspections, Licenses and Permits. Only to the extent that a registrant with the Department of Inspections, Licenses and Permits is authorized to do work, shall a registered master, master restricted, limited heating, ventilation, air-conditioning and refrigeration contractor be eligible to apply for permits authorized by this code.

B. A mechanical permit issued in accordance with § 82-12 of this Code may be issued to the owner of a single-family dwelling occupied exclusively by the owner upon the following conditions:

(1) All work must be done in accordance with this code.

(2) The owner shall be tested and qualified by the Department of Inspections, Licenses and Permits in accordance with requirements established by the Mechanical Board.

(3) The owner shall sign an affidavit agreeing to comply with all applicable provisions of this chapter and attesting that the location in which the work will be performed is the applicant's primary residence.

**§ 82-[10]8. Change of registered contractors.**

Upon written notification by a master, master restricted, limited heating, ventilation, air-conditioning and refrigeration contractor to the Department of Inspections, Licenses and Permits, a permit may be

canceled upon satisfactorily meeting the following requirements:

A. A minimum 7 working day waiting period commencing the day that the Department of Inspections, Licenses and Permits receives the cancellation request.

B. The Department of Inspections, Licenses and Permits certifies that the work performed to date is code compliant and that the work has been deemed not to pose a threat to the health, safety or welfare of the public.

C. In the case where another registered contractor will be performing the remainder of the work, the new registered contractor shall submit to the Department of Inspections, Licenses and Permits an assumption agreement on a form provided by the Department prior to a new permit being issued.

**§ 82-[11]9. Plans and specifications.**

A. Plans and specifications for the installation of all heating, ventilation, air-conditioning or refrigeration systems shall:

(1) Be approved by a licensed Maryland HVACR master, HVACR master restricted licensed for the system being installed, or a Maryland licensed professional engineer or architect; and

(2) Have affixed to them the name and license number of the Maryland HVACR master, HVACR master restricted licensed for the system being installed, or Maryland licensed professional engineer or architect.

B. For installations other than one-family and two-family dwellings, adequate details of mechanical and electrical work, including computations, diagrams and other essential technical data, shall be filed. All engineering plans and computations shall bear the signature and license number of the licensed engineer, architect or mechanical licensee responsible for the design. For one-family and two-family dwellings, a residential heat gain and loss load calculation, for example, a Manual J evaluation or equivalent supporting documentation acceptable to the Department, shall be filed for new installations at the time of permit application. For

replacement of a condensing unit, air-handling unit, furnace or boiler in an existing HVACR system in one-family and two-family dwellings the permit application shall be accompanied with documentation reflecting calculations by which the sizing of the equipment to be installed was determined. A signed and dated copy of this document shall be retained by the contractor, and a copy shall be left with the homeowner upon completion of the work. Plans shall indicate how required structural and fire resistance rating integrity will be maintained and where penetrations will be made for electrical, mechanical, plumbing and communication conducts, pipes and systems.

**§ 82-[12]10. Modifications.**

A. Definitions.

(1) As used in this code, the term "Code Official" means the Director of the Department of Inspections, Licenses and Permits.

(2) As used in this code, the term "Department of Mechanical Inspection" means the Department of Inspections, Licenses and Permits.

(3) As used in this code, the term "Harford County Hazardous Materials Team" means the Harford County Hazardous Materials Team as created by the Harford County Division of Emergency Operations.

(4) As used in this code, the term "International Fuel Gas Code" means the Harford County Plumbing Code, Chapter 202 (§ 202-1, *et seq.*) of the Harford County Code, as amended.

(5) As used in this code, the term "International Plumbing Code" means the Harford County Plumbing Code, Chapter 202 (§ 202-1, *et seq.*) of the Harford County Code, as amended.

B. The following sections are changes or additions to certain sections of the [2006]2009 International Mechanical Code:

(1) Subsection 101.1 is amended by deleting "[name of jurisdiction]" and inserting in

lieu thereof "Harford County, Maryland".

(2) Subsection 101.2.1 is deleted and the following is inserted in lieu thereof:

**"101.2.1 Appendices.** Provisions in Appendix A, Combustion Air Openings and Chimney Connector Pass-Throughs, shall be deemed as part of this code."

(3) Subsection 106.2 is amended by adding the following:

"9. Repair, service and maintenance of existing equipment."

[(4) New Subsection 101.5 is added as follows:

**"101.5 Effective date for permitting.** Section 106 is applicable to all mechanical installations governed by this code commenced on or after July 1, 2010.

**Exception:** Mechanical system installations governed by this code in which an associated building permit was applied for prior to July 1, 2010."

(5)](4) Subsection 106.3.1 is amended by deleting "by a registered design professional" in the sixth line and inserting "in accordance with § 82-11 of this article" in lieu thereof.

[(6)](5) New Subsection [106.3.2]106.3.4 is added as follows:

**"[106.3.2]106.3.4 Applicants.** Only an individual registered in accordance with § 82-8 of this article shall be eligible to make application for permit to do work in accordance with this code."

[(7)](6) Subsection 106.4.3 is amended by deleting "180 days" in the fourth line and inserting "12 months" in lieu thereof.

[(8)](7) New Subsection 106.4.5.1 is added as follows:

**"106.4.5.1 Withholding permits.** The Code Official may withhold the issuance of any permit and/or place a hold on inspections if the applicant, the owner or any individual listed on the application as a responsible officer (if the applicant is a business entity) has failed to remedy or correct any existing/alleged violation of the Harford County Code on any construction projects in Harford County for which the applicant has been cited by any County agency."

[(9)](8) Subsection 106.5.1 is amended by deleting "100 percent of the usual permit fee" and replacing with "an administrative fee in accordance with § 157-30 of the Harford County Code, as amended".

[(10)](9) Subsection 106.5.2 is amended by deleting "the following schedule [jurisdiction to insert approprite schedule]" and replacing with "§ 157-30 of the Harford County Code, as amended".

[(11)](10) Subsection 106.5.3 is hereby deleted and the following is inserted in lieu thereof:

**"106.5.3 Fee refunds.** The Code Official shall authorize the refunding of fees in accordance with § 157-16B and § 157-16C of the Harford County Code, as amended."

[(12)](11) Subsection 108.4 is amended by deleting "[specify [amount] OFFENSE]" in the seventh line, "[amount]" in the eighth line and "[number of days]" in the ninth line and replacing with "misdemeanor", "$1,000.00" and "90 days" respectively.

[(13)](12) Subsection 108.5 is amended by deleting "any person who shall continue any work on the system after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable for a fine of not less than [amount] dollars or more than [amount] dollars".

[(14)](13) Subsection 109.1 is amended by adding "as established in Article I of this chapter".

[(15)](14) Subsection 202 general definitions is amended by adding the following definition between the definitions of "registered design professional" and "return air":

**"Repair.** To put back in good condition, fix, to renew parts, to make existing systems function. Anything that can be made to work is repairable. The replacement of a system or a condenser unit, air-handling unit, furnace or boiler which make up a system shall constitute altering or remodeling, not repair."

[(16)](15) Subsection 301.11 is amended by adding "Temporary repairs may not be made to a damaged heat exchanger." at the end of this subsection.

**ARTICLE IV. TRANSITIONAL PROVISIONS**

**§ 82-[13]11. Status of building and mechanical permits applied prior to effective date of this [article]CHAPTER.**

This [article]CHAPTER shall not apply to buildings for which a valid building or mechanical permit was applied for prior to the effective date of this [article]CHAPTER.

**§ 82-[14]12. Saving clause.**

Nothing in this chapter hereby adopted shall be construed to affect any suit or proceedings [im]pending in any court, or any rights acquired, or liability incurred, or any cause or causes of action acquired or existing, under any act or ordinance hereby repealed, nor shall any just or legal right or remedy of any character be lost, impaired or affected by this ordinance.

Section 2. And Be It Further Enacted that this Act is hereby declared to be an emergency act necessary for the protection of the public health, safety and welfare and to provide for necessary local amendments regarding the administration and enforcement of the International codes adopted by the Maryland Building Performance Standards, and this Act shall take effect on the date it becomes law.

EFFECTIVE: January 4, 2011

*The Council Administrator does hereby certify that fifteen (15) copies of this Bill are immediately available for distribution to the public and the press.*

Barbara J. O'Connor
*Council Administrator*

| Agricultural BuildingS PermitTING Requirements [Table] | | | | |
|---|---|---|---|---|
| | **Structures Exempt in accordance with Subsection 105.2(1) Structures not greater than 200 s[quare]f[eet] NO PERMIT APPLICATION REQUIRED** | **Structures Exempt in accordance with Subsection 105.2(14) Agricultural Exemption NO PERMIT APPLICATION REQUIRED** | **Subordinate accessory use within an agricultural building. Provided for in Subsection 105.2(14) in accordance with Subsections 302.2, [and] 302.2.1 AND ANY CODE SECTIONS REFERENCED THEREIN, OF THE 2003 INTERNATIONAL BUILDING CODE. 3,000 s[quare]f[eet]/750 s[quare]f[eet] Rule** | **Not within the scope of the Building Code** |
| Livestock shelters or buildings, including shade structures and milking barns | X | X | | |
| Poultry buildings or shelters | X | X | | |
| Barns | X | X | | |
| Storage or equipment and machinery used exclusively in agriculture | X | X | | |
| Horticultural structures, including detached production greenhouses and crop protection shelters | X | X | | |
| Sheds | X | X | | |
| Grain Silos | X | X | | |
| Stables and indoor riding arenas, whether or not open to the general public, up to 750 s[quare]f[eet] | X | X | | |
| Agricultural retail buildings, up to 3,000 s[quare]f[eet] | X | X | X | |
| Farm Tours of agricultural structures with no accessory use | | | | X |
| Areas used for parties and receptions within Agricultural buildings | X | | X | |
| Private parties and receptions within an agriculatural building | | | | X |
| Parties and receptions within an agricultural building open to the general public, up to 750 s[quare]f[eet] | | | X | |
| Indoor dining areas for less than 30 people, up to 750 s[quare]f[eet] | X | | X | |
| Auction houses | X | | X | |
| Restaurants, up to 750 s[quare]f[eet] | X | | X | |
| Private bathrooms and offices within an agricultural buildings | | | X | |

HARFORD COUNTY BILL NO. 10-35

Brief Title Building Code, Residential Code, Mechanical Code

is herewith submitted to the County Council of Harford County for enrollment as being the text as finally passed.

**CERTIFIED TRUE AND CORRECT**

Barbara J. O'Connor
Council Administrator

Date January 4, 2011

**ENROLLED**

Billy Boniface
Council President

Date January 4, 2011

**BY THE COUNCIL**

Read the third time.

Passed: LSD 11-1

Failed of Passage: _____

By Order

Barbara J. O'Connor
Council Administrator

Sealed with the County Seal and presented to the County Executive for approval this 4th day of January, 2011 at 9:00 p.m.

Barbara J. O'Connor
Council Administrator

**BY THE EXECUTIVE**

David R. Craig
COUNTY EXECUTIVE

APPROVED: Date 1-4-11

**BY THE COUNCIL**

This Bill No. 10-35 having been approved by the Executive and returned to the Council, becomes law on January 4, 2011.

EFFECTIVE DATE: January 4, 2011

Barbara J. O'Connor
Barbara J. O'Connor
Council Administrator